Marco Mendieta Parihuancollo

Manual del programador Java SE 24

```
\langle class\ modifiers \rangle\ class\ \langle identifier \rangle \langle type-parameters \rangle
\langle super-class \rangle\ \langle super-interfaces \rangle
\langle permitted-subclasses \rangle\ \{\langle body \rangle\}
```





MDT496 ESTUDIOS DEPARTAMENTO DE OBRAS LITERARIAS DESARROLLO DE APLICACIONES MULTIPLATAFORMA Java® — Web — Android — MathCAD — Mapletm — LATeX

Manual del programador Java SE 24

Especificación fundacional de la plataforma Java

Marco Mendieta Parihuancollo

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Manual del programador Java SE 24, Especificación fundacional de la plataforma Java

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Dedicatoria

Este trabajo, producto de un gran esfuerzo, va dedicada a las personas más importantes en mi vida: mi madre **Dolores**, y en memoria de quien en vida fue, mi padre **Marcos E.**(†).

Prefacio

En el 2019 cuando se estaba desarrollando aplicaciones para Android, por ejemplo, la aplicación CIV 3306 [MDT496::022MPZ6ZUNSETANG8] para la materia de Análisis Matricial de Estructuras UTO-FNI [MDT496::036MPAAAF]; en aquel momento el lenguaje en que se programaba era Java. Es cuando nace el proyecto 036MPAAAZ, para ser el documento fundacional de especificación de lenguaje estructurado, descentralizado, de formato normalizado (a nivel de código), consistente y fundamentado en documentos más especializados.

Establecimiento de los lineamientos y la propuesta del estándar:

- Tipología: Monografía base de especificación técnica del lenguaje de programación Java[®].
- Tópicos: Investigación académica; Tecnología informática; archivos de texto plano; Ciencias de la computación; desarrollo de aplicaciones; programas de cómputo Geodésico y Sistemas de Procesamiento Analítico.

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Marco Mendieta Parihuancollo Oruro, abril 2025

Keywords Java · Handbook · Programming

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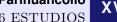
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Apéndice B

Change History

Índice

Glosario

Lista de	abreviaciones	CGM	Computer Graphics Metafile.
0-D	Zero Dimensional.	CIM	Common Information Model.
1-D	One Dimensional.	CLI	common language infrastructure.
2-D	Two Dimensional, pág. 345.	СМ	Central meridian.
3-D	Three Dimensional.	СОМ	Component Object Model.
AGL	Above Ground Level Altitude measure (Altura sobre el nivel de la tierra).	CRF	Coordinate reference frame.
Al	Artificial intelligence.	CRS	Coordinate reference system.
AIDC	Automatic Identification and Data Cap-	CS	Coordinate System.
	ture.	CSS	Cascading Style Sheets.
AJAX	Asynchronous JavaScript and XML.	CSV	Comma-separated values.
AMS	American Mathematical Society.	DAO	Data Access Object.
ANSI	${\bf American\ National\ Standards\ Institute}.$	DEG (°)	Degree.
APA	American Psychological Association.	DGNSS	Differential Global Navigation Satellite
API	Application Programming Interface, pág.	5.	System.
APIO	Asia-Pacific Informatics Olympiad, pág. 4	₁₈ ₽GPS	Differential Global Positioning System.
ASCII	American Standard Code for Information Interchange.	DIN	Deutsches Institut für Normung e.V., German Institute for Standardization.
ASTM	American Society for Testing and Mate-	DIS	Draft International Standard.
	rials.	DoG	difference of Gaussians.
AWT	Abstract Window Toolkit, pág. 4.	DOI	Digital Object Identifier.
BIM	Building Information Modeling.	DOM	Document Object Model.
BOI	Baltic Olympiad in Informatics, pág. 484.	DSD	Drawing Set Descriptions (Autodesk).
CAD	Computer Aided Design.	DTD	Document Type Definition (of XML).
CAM	Computer Aided Manufacturing.	DVI	Device Independent File.
CAS	Computer Algebra System.	DWF	Design Web Format (Autodesk).
CEOI	Central European Olympiad in Informatics, pág. 484.	DXF	Drawing eXchange Format.

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EAN	European Article Numbering (known as	GPST	Global Positioning System time.
EDE0	EAN International, now called GS1).	GPX	Global Positioning System Exchange For-
ED50	European Datum 1950.	CBC00	mat.
EDGE	Enhanced Data rates for GSM Evolution.	GRS80	Geodetic Reference System 80.
EGDB	Oracle Enterprise Geodatabase.	GSM	Global System for Mobile communication.
EHE	Estimated Horizontal Error.	GTIN	Global Trade Item Number.
EM	Electromagnetic.	GUI	Graphical User Interface, pág. 345.
EPE	Estimated Position Error.	HDOP	horizontal dilution of precision.
EPSG	European Petroleum Survey Group.	HTML	Hypertext Markup Language.
ESA	European Space Agency.	HTTP	Hypertext Transfer Protocol.
Esri	Environmental Systems Research Insti-	HTTPS	Hypertext Transfer Protocol Secure.
FUDOCI	tute.	IA	integrated assessment.
EUROGI	European Umbrella Organization for Geographic Information.	IAG	International Association of Geodesy.
FDS	Formal Data Structure.	IAU	International Astronomical Union.
GDAL	Geospatial Data Abstraction Library.	IBNORCA	Instituto Boliviano de Normalización y Calidad.
GDAS	Geographic Data Attribute Set.	ICA	International Cartographic Association.
GDF	Geographic Data Files.	ICPC	International Collegiate Programming Con
GDOP	Geometrical Dilution of Precision.	101 0	test, pág. 484.
GEOINT	Geospatial Intelligence.	ICRF	${\bf International\ Celestial\ Reference\ Frame.}$
GI	geographic information.	ICRS	${\bf International\ Celestial\ Reference\ System.}$
GIF	graphics interchange format.	ICSU	International Council for Science.
GIS	Geographic Information System.	IEC	International Electrotechnical Commis-
GKS	Graphical Kernel System.		sion.
GLONASS	Globalnaya Navigatsionnaya Sputnikovaya Sistema.	IEEE	Institute of Electrical and Electronics Engineers.
GML	Geography Markup Language.	IETF	Internet Engineering Task Force.
GMT	Greenwich Mean Time, pág. 205.	IOI	International Olympiad in Informatics, pág. 484.
GNSS	Global Navigation Satellite System.	IS	International Standard.
GPL	GNU General Public License, pág. 22.	ISAN	International Standard Audiovisual Num-
GPRS	General Packet Radio Service.		ber.
GPS	Global Positioning System.	ISBN	International Standard Book Number

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Change History

$MDT496\ ESTUDIOS\ -Proyecto\ {\tt O36MPAAAZ}$

This version history only contains automatically generated entries.

0.0.1
2019-09-09: Clase (class keyword) fundacional
Compilación (javac engine) fundacional
Constructores (this keyword) fundacional 101
Ejecución (java engine) fundacional 6
Especificador Abstract (abstract keyword) fundacional
Especificador Final (final keyword) fundacional
Especificador static (static keyword) fundacional
Estructuras de control (if keyword) fundacional
Excepciones (try keyword) fundacional
Ficheros compilados (.class fileextension) fundacional
Funciones sobrecargadas (Overloading) fundacional
Interface (interface keyword) fundacional
Mi primer código (.java fileextension) fundacional 16
Modificadores (public, private, protected) fundacional 103
Objeto (new keyword, instancia de clase) fundacional
Operadores (+ infix operator) fundacional
Paquetes (package keyword) fundacional
Variables (int keyword) fundacional
0.2.1
2020-09-15: Agregado toString, hashCode y equals (Sobrescritura)
0.2.3
2020-10-11: Agregado String – Text Blocks (Java SE 15)
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0.3.5
2021-10-31: Agregado Interfaces de Usuario con AWT
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0.4.4	
2025-04-07: Modificado JavaFX (Interfaces gráficas)	7